Claims

1. (canceled)

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2. (currently amended) ~~The method according to claim 1 wherein said grouping step includes the step of:~~
A method of assigning identifying indicia to objects in multidimensional space comprising the steps of:
sorting objects initially according to a first dimension of their location in multi- dimensional space;
determining ambiguities among coordinate values of their location in the multi-dimensional space according to whether separation of objects in a dimension is less than a predetermined threshold value;
grouping subsets of objects according to ambiguities in the objects; and
ordering ambiguous objects in subsets according to other dimensions of the multidimensional space.

3. (original) The method according to claim 2 wherein said determining step includes the step of
ascertaining a predetermined threshold value based on known errors of position measurements.

4. (currently amended) The method according to claim ~~1~~ 2 including an initial step of:
selecting as the first dimension of a multidimensional coordinate system that dimension along which separation of objects exhibits the greatest dispersion.

5. (currently amended) The method according to claim ~~1~~ 2 wherein said grouping steps includes the step of:
determining ambiguities among coordinate values according to whether separation of targets is less than any of a plurality of predetermined threshold values.

6. (original) The method according to claim 2 wherein said determining step includes the step of:

ascertaining a predetermined threshold value based on a maximum rate of change of position of one target with respect to any other.

7. (original) The method according to claim 5 wherein said determining step includes the steps of:

ascertaining one of said predetermined threshold values based on maximum rate of change of position of one object with respect to any other; and

ascertaining another one of said predetermined threshold values based on the random errors of measurements in positions of the objects.

8. (original) A method of sorting indicia corresponding to objects moving through a multidimensional space comprising the steps of:

scanning the multidimensional space to detect positions of objects therein;

assigning unique indicia to each detected object;

sorting assigned indicia along one coordinate axis of the multidimensional space;

grouping into subsets any indicia exhibiting an ambiguity along the coordinate axis; and

ordering indicia in subsets according to other coordinate axes of the multidimensional space.